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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/852,174

05/09/2001

Fernando Incertis Carro

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09/21/2004

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EXAMINER

TRAN, TONGOC

ART UNIT

PAPER NUMBER

2134

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/852,174	Applicant(s) CARRO ET AL.	
	Examiner Tongoc Tran	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in response to applicant's application serial no. 09/852174 filed on 5/9/2001.

#### *Claim Objections*

2. Claim 1 is objected to because of the following informalities:

The “;” after “the steps of:” appears to be a typographical error.

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 recites the limitation:

"said authentication code" and "an said authentication code" in lines 1 and 2;

"said carrier", "a said first set", "a said second set" in lines 4 and 5;

"a said first pattern" and "said first set" in line 6;

"said first pattern" in line 7;

"a second pattern" and "said second set" in line 8;

"said transformed first pattern" and "said second pattern" in lines 9 and 10;

There are insufficient antecedent basis for this limitation in the claim.

4. Regarding claim 19, the phrase "a computer-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by

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"the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-5, 8, 11-14 and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Jakubowski et al. (U.S. Patent No. 6,128,737, hereinafter Jakubowski).

In respect to claim 1, Jakubowski discloses a method for uniquely authenticating each replication of plurality of soft-copy documents, said plurality of soft-copy documents forming a group, comprising the steps of:

selecting one soft-copy document out of said group to become a carrier for an authentication code aimed at protecting said group (see col. 3, lines 34-40);

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concatenating said plurality of soft-copy documents, said concatenating including the step of using a canonical form of said selected soft-copy document (see col. 11, lines 40-58);

computing an authentication code from said concatenated plurality of soft-copy documents and a predetermined key; generating a random number; and creating said carrier by combining said random number and said authentication code and marking said selected soft-copy document (see col. 3, line 34-col. 4, line 16).

In respect to claim 2, Jakubowski discloses the method according to claim 1 wherein said step of concatenating uses all of said plurality of soft-copy documents with the exception of said selected soft-copy document (see col. 11, lines 40-58).

In respect to claim 3, Jakubowski discloses the method according to claim 1 wherein said step of concatenating is replaced by the step of picking up a single soft-copy document (see col. 11, lines 40-58).

In respect to claim 4, Jakubowski discloses the method according to claim 1 wherein the creating said carrier comprises the steps of:

splitting said selected soft-copy document into a first set of data and a second set of data on the basis of said authentication code; utilizing said random number to mark said first set; transforming said random number; utilizing said transformed random number to mark said second set; and reassembling said first set and said second set into said carrier (see col. 3, lines 34-40).

In respect to claim 5, Jakubowski discloses the method according to claim 1 wherein said selected soft-copy document is a plain text document and said first set and

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said second set comprise sets of words from said plain text document (see col. 9, lines 1-32).

In respect to claim 8, the claim limitation is similar to claim 5. Therefore, claim 8 is rejected based on the similar rationale.

In respect to claim 11, Jakubowski and Bender disclose the method according to claim 4 wherein said authentication code, said random number, said transformed random number are binary vectors fitting respectively in said selected soft-copy document, said first set and said second set (see col. 9, lines 45-53).

In respect to claim 12, Jakubowski and Bender disclose the method according to claim 4 wherein said splitting step includes the steps of:

forming said first set with the words from said selected soft-copy document corresponding to the ones of said authentication code; and forming said second set with the words from said selected soft-copy document corresponding to the zeros of said authentication code (Jakubowski, col. 9, lines 32-58).

In respect to claim 13, Jakubowski discloses the method according to claim 1 wherein said computing step comprises the steps of:

computing said authentication code from said concatenated plurality of soft-copy documents, said key and a counter; testing said authentication code for a prespecified range of zero values to one values; if said code does not fall within said prespecified range; incrementing said counter; and resuming at computing step; and if said code does fall within said prespecified range; validating said authentication code; and exiting said computing step (see Jakubowski, col. 4, lines 35-48).

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In respect to claim 14, the claim limitation is substantially similar to claim 13.

Therefore, claim 14 is rejected based on the similar rationale.

In respect to claim 16, the method for checking said authentication code comprising the steps of:

obtaining an said authentication code; splitting said carrier into a said first set and a said second set; extracting a first pattern from said first set; transforming said first pattern; extracting a second pattern from said second set; comparing said transformed first pattern and said second pattern; and if matching: passing checking; and if not matching: failing checking (see col. 3, line 65-col. 4, line 53).

In respect to claims 17 and 19, the claim limitations are substantially similar to claim 1. Therefore, claims 17 and 19 are rejected based on the similar rationale.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jakubowski et al. (U.S. Patent No. 6,128,737, hereinafter Jakubowski) in view of Bender et al. ("Techniques for Data Hiding", IBM System Journal, Vol. 35, pages 332-335, hereinafter Bender).

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In respect to claim 6, Jakubowski discloses the method according to claim 5. Jakubowski does not disclose but Bender discloses wherein said plain text document is marked through the insertion of extra blanks (see Bender, pages 332-333). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate bender's teaching of encoding data through the manipulation space with Jakubowski's teaching of inserting an encrypted version of the MAC into a predefined message because change of spaces does not changes the meaning of text and a casual reader is unlikely to take notice of slight modification to white space.

In respect to claim 7, Jakubowski and Bender disclose the method according to claim 6 wherein the step of using said canonical form of said plain text document includes the step of:

stripping all interword blank characters, in excess of one, off said plain text document; thereby, obtaining said canonical form (see Bender, Fig. 29 and pages 332-333).

In respect to claim 9, the claim limitation is substantially similar to claim 6. Therefore, claim 9 is rejected based on the similar rationale.

In respect to claim 10, the claim limitation is substantially similar to claim 7. Therefore, claim 10 is rejected based on the similar rationale.

#### ***Allowable Subject Matter***

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Atalla discloses method and means for combining and managing personal verification and message authentication encryption for network transmission.
- Petrogiannis discloses method and parallel approval of an electronic document.
- Leslie discloses a method and apparatus for generating a digital message authentication code.
- rose et al disclose method and apparatus for generating a Message Authentication Code.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (703) 305-7690 or (571) 272-3842 after 10/21/2004. The examiner can normally be reached on 8:30-5:00 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 or (571) 272-3838 after 10/21/2004.

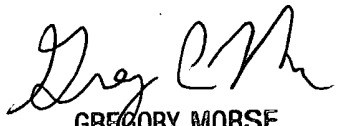
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Examiner: Tongoc Tran  
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TT

  
September 14, 2004

  
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